

Notice of Allowability

Application No.

10/698,409

Examiner

Anthony Mackowey

Applicant(s)

KUNISA, AKIOMI

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 15 August 2007.
2. ☒ The allowed claim(s) is/are 2,3,4 and 5; renumbered 1-4.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Cancel claims 8-19 and 21-26.

Claims 8-19 and 21-26 correspond non-elected species. Election of the Species corresponding to Embodiment 3 was made without traverse in the response filed 30 March 2007.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Claim 2 recites, "a location information generating unit which generates a plurality of candidate locations of the host data in which the first digital watermark is to be embedded; a first embedding unit which embeds the first digital watermark in the respective candidate locations of the host data and generates a plurality of candidates for a first watermarked host data; a first evaluating unit which evaluates robustness of the first digital watermark hidden in the respective candidates for the first watermarked host data; and a first selecting unit which selects one of the plurality of the candidates for the first watermarked host data according to the evaluated robustness and outputs the selected one as the host data in which the first digital watermark is embedded."

Claim 3 recites, “a scrambling unit which scrambles the information on the watermarking location and generates a plurality of candidate watermarks; a second embedding unit which embeds the respective candidate watermarks in the host data in which the first digital watermark has been embedded and generates a plurality of candidates for a second watermarked host data; a second evaluating unit which evaluates robustness of the respective candidate watermarks hidden in the respective candidates for the second watermarked host data; and a second selecting unit which selects one of the plurality of the candidates for the second watermarked host data according to the evaluated robustness.”

Claim 4 recites, “a scrambling unit which scrambles the information on the watermarking location and generates a plurality of candidate watermarks; a second embedding unit which embeds the respective candidate watermarks in the host data in which the first digital watermark has been embedded and generates a plurality of candidates for a second watermarked host data; a second evaluating unit which evaluates robustness of the respective candidate watermarks hidden in the respective candidates for the second watermarked host data; and a second selecting unit which selects one of the plurality of the candidates for the second watermarked host data according to the evaluated robustness, wherein the second embedding unit restricts the candidates for the second watermarked host data to be within an acceptable degradation range for the host data after the first digital watermark is embedded and to be within an acceptable degradation range for the original host data before the first digital watermark is embedded.”

The above features, as explicitly recited, in combination with the other elements of the claims are neither disclosed nor suggested by the prior art of record. JP 2002-082612 to Mizutani et al. (“Mizutani”) cited in Applicant’s IDS discloses a digital watermark embedding apparatus

comprising: a first embedding block which embeds a first digital watermark in a host data; and a second embedding block which embeds information on watermarking location of the first digital watermark, as a second watermark, into the host data in which the first digital watermark has been embedded (paragraphs 12 and 13). However, Mizutani does not disclose or suggest generating a plurality of candidate watermark locations; embedding the watermark in each of the candidate locations; evaluating the robustness of watermark embedded in the locations; and selecting one of the candidate according to the robustness. Mizutani also does not disclose or suggest generating a plurality of candidate watermarks; embedding each of the candidate watermarks; evaluating the robustness of the embedded candidate watermarks; and selecting one of the candidates according to the robustness.

Claim 5 depends from claim 4 and therefore incorporates all the limitations of the claim from which it depends.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

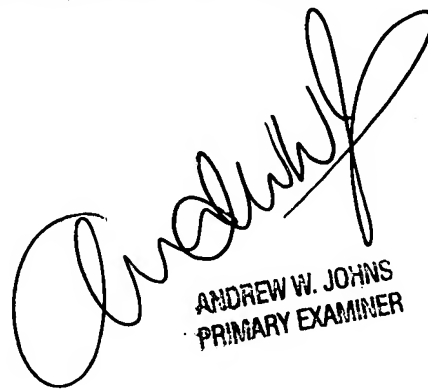
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Mackowey whose telephone number is (571) 272-7425. The examiner can normally be reached on M-F 9:00-6:00.

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AM
8/28/07



ANDREW W. JOHNS
PRIMARY EXAMINER